

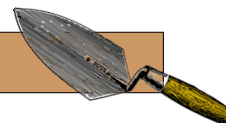


Appleby Archaeology Newsletter



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A note from the Chairman

Our next meeting will be January's AGM and Members' Evening. The Minutes for last year's meeting, the Agenda for this coming year and a Membership Renewal Form (subscriptions are due for renewal in January) are enclosed with this newsletter. Please note that if you have joined since October you will have already paid your 2018 subscription.

Because the AGM marks the start of Appleby Archaeology's 20th anniversary, this will be a special meeting featuring wine and cake. Martin Railton will present a round-up of the DigAppleby project and there will also be opportunities for members to take a walk down 'memory lane' and recall some of the events that have brought us so much fun and pleasure over the years. I do hope you'll be able to join us for the evening.

If you get your newsletter by email, you may have noted that you will have been offered the opportunity to renew your membership electronically via Paypal as well as through the usual "cheque and form" procedure. If you have a Paypal account this makes payment the work of a few seconds. Just click the Paypal link in your newsletter email and follow the instructions. The payment is debited from the card you've registered in your Paypal account. If you don't have a Paypal account these are very easily created.

There are advantages for your Committee here too. The more members that pay by Paypal the less work for our Treasurer since, with digital payments, there are no cheques to trundle down to the bank. I mention this because Mike Godfrey, our excellent Treasurer of these last thirteen years will be standing down at the AGM. My hope is that this will make the business of finding a replacement a bit easier. So finally, let me just wish you

A very Merry Christmas and a Happy New Year

Martin Joyce



Appleby Archaeology Group began their season of winter evening lectures on Thursday in the town's Supper Room with an excellent illustrated talk by Peter Ryder, Historic Building Consultant and independent archaeologist with a particular knowledge of medieval architecture and sculpture. The subject of his talk was the Medieval Cross Slab Grave Covers of Cumbria and all present were fascinated and impressed by what they learnt.

Mr Ryder's interest in medieval grave slabs began many years ago when he first saw some that had been propped up in a church in Bridekirk and that were in a state of some disrepair – the detail and skill of the engraving on them prompted him to start recording, surveying and drawing these slabs. Also in the 1970s he came across a book by C Clement-Hodges – "The Sepulchral Slabs of the County of Durham" –



and in this book were some of the author's own personal notes and observations about individual slabs. From that moment Peter was determined to do more to help record, preserve and save as many as possible.

In the 1990s he visited and surveyed 160 church and monastic sites in Cumbria and this resulted in him recording, in photographs and drawings, 452 slabs. Early records indicated at the time that there were another 74 slabs in the county but their whereabouts were unknown. Using old documents and archival records he found some of the missing ones but many still remain undiscovered and are still waiting to be located.

Dating between about the 12th to 15th Centuries, grave slabs such as these are among the most common forms of memorial to survive from this era and they give us a tangible link to the past, to real people

Contents

Page 2: Sequencing ancient British genomes

Page 3: The Battle of Towton

Page 4: Loadpot Hill Stone Circle & Winter Lectures

and aspects of their lives. Most of the slabs are no longer in their original location and over time they have been re-used and re-set into the fabric of church buildings, used as lintels in the walls of porches to create a piscina, or set on the top of boundary walls – but they still reveal much to us today from the symbols and designs on them.

The emblem which occurs most frequently is the sword. This indicates a male burial and the sword is almost always on the right hand side of the slab. In Cumbria, 123 grave slabs depict a sword and 97 of them have the sword on the right. The second most common symbol is a pair of shears – indicating a female. Mr Ryder explained how the carving of symbols was a sort of follow-on from “grave goods” – rather than an individual being interred with actual goods as in earlier centuries. The symbols on their grave slabs represent something that had been important to them in life or indicated their status. Many slabs show objects connected with trades or skills and we can offer an educated opinion as to what the interred individual might have done – for instance a bow and quiver to represent a hunter or a forester, a set square to represent a mason, an axe for a carpenter, horseshoe, pliers and hammer for a blacksmith. Personal names appear very infrequently so the burial slab with the engraving “Domina Eoa de Nevt” which denotes a woman, Eoa, buried in the cloister walk of a Cumbrian abbey is a rare thing.

Mr Ryder went on to explain that symbols of chalice and book with a clasp almost always denote the burial of a priest – but there is a mystery on one of Cumbria’s 15th Century slabs which has the female symbol of shears but also a chalice and a book – the anomaly has yet to be explained! He showed many fine examples of different styles of engraved crosses on the slabs ranging from very plain to elaborate ones wreathed with foliate designs of varying complexity. Where the sacred monogram IHC is included this usually means the slab was carved at the latter end of the medieval era. He then presented the group with another conundrum – the burial slab on the grave of Bishop Bell (1496) in Carlisle Cathedral has numerous carvings of birds and animals but also includes two shapes very reminiscent of Brontosaurus dinosaurs. Did the Bishop believe these creatures still co-existed with modern moderns? It certainly prompted a few theories from the audience. Finally he ended with a self-penned song about Bishop Bell’s grave slab and the dinosaur images – it was an entertaining way to end what had been an enthralling talk .. and a first for the group! Everyone left the evening smiling, and it’s a likely bet that no-one present will ever forget Bishop Bell or his grave slab.

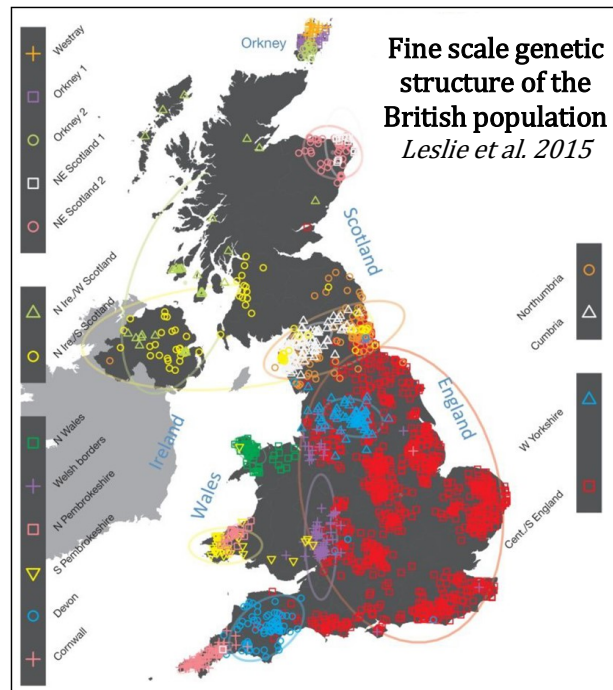
Carol Dougherty



Our thanks to Peter Ryder for providing the photograph of the Melmerby Shears Slab

Sequencing ancient British genomes

The Appleby Archaeology Group’s November talk was given by Dr Matthew Teasdale, recently of the Institute of Genetics at Trinity College Dublin and now at Bio-Arch, University of York. Dr Teasdale’s subject was the sequencing of ancient British Genomes.



A genetic palimpsest of ancient human migrations

Matthew began by explaining how genome research can benefit archaeology by providing evidence of where distinct individuals and populations of ancient peoples originated and by determining and comparing mutations in ancient DNA recovered from human remains unearthed at archaeological sites. Such advances have been made possible largely by the drastic reduction in the costs of sequencing and also the exponential growth in computing power over the last 10-12 years. In 2004/5, the cost of sequencing a single genome was somewhere around US\$10 million. In 2017 the same can be achieved for US\$1000 - 2000. It is now even possible for any individual with £79 to have their own genome sequenced to look at his or her own ancestral geographic origins.

Another advantage of DNA sequencing in archaeological research is that it can be cross referenced with Carbon14 dating, which is by now a long established method of obtaining dating evidence from organic remains.

Matthew went on to describe the methodology of analysing an ancient genome. The technique uses mitochondrial DNA recovered from human bone, preferentially the petrosal bone just above the ear. This is because this bone is one of the most dense in the human body and thus contains many more cells for a given sample size. The bone sample is broken down into individual proteins and then into the cellular matrix from which the DNA is extracted. Mitochondrial DNA is

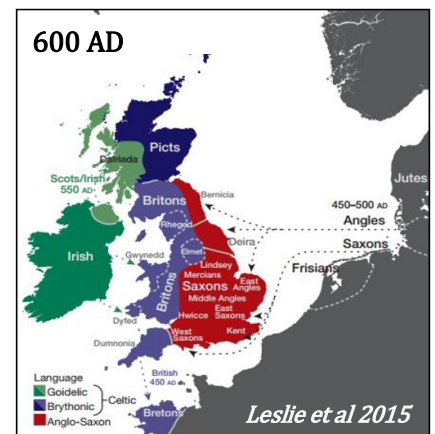
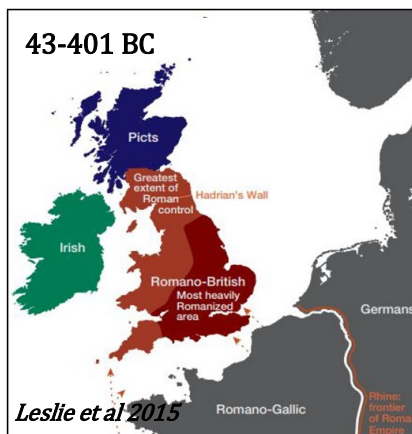
found in both men and women and is used in preference to nuclear DNA, primarily because it evolves much faster, being directly inherited by an individual from the mother. In addition, a large number of copies of the genome are found in a single cell, unlike nuclear DNA, which contains just one. Finally, it is very well conserved within the cell over time.

Matthew continued his talk by explaining the practical application of ancient DNA sequencing on which he had been working while in Dublin. The team of which he had been a part had been investigating the migratory history of British populations, which typically had previously been examined using mainly archaeological methods, such as artefacts, including grave goods, differing burial practices, inscriptions and texts. In order to apply the new techniques to a similar range of individuals, they took samples from seven male genomes from a Roman context, dated between the 4th and 7th Centuries, which had been excavated in 2004-5 from a cemetery in York. In total, the remains of 82 males had been identified at the site, all aged between 19 and 45, over half of whom had been beheaded, so the cemetery was generally thought to have contained burials of either gladiators or criminals. In addition, the team included DNA from an iron age woman from Yorkshire, dated circa 100BC and an Anglo-Saxon man from County Durham, circa 800AD. These samples were compared to a large database of genomic information from modern populations.

The findings were extremely interesting. All the individual samples revealed mitochondrial genomes common in modern European populations and showed that of the seven males buried within a Roman context, most were found to belong to a North Western European grouping and to have a close genetic resemblance with a modern Welsh, ie. a native British population, rather than those from Yorkshire. The mitochondrial DNA from the iron age female showed a similar pattern, whilst that from the Anglo-Saxon male most resembled that of modern East Anglian and Dutch people, confirming the influx of a Germanic population during the post-Roman occupation. Analysis of the 'Y' DNA (which is only inherited by males from their fathers) of remains in the Roman context confirmed the Western European

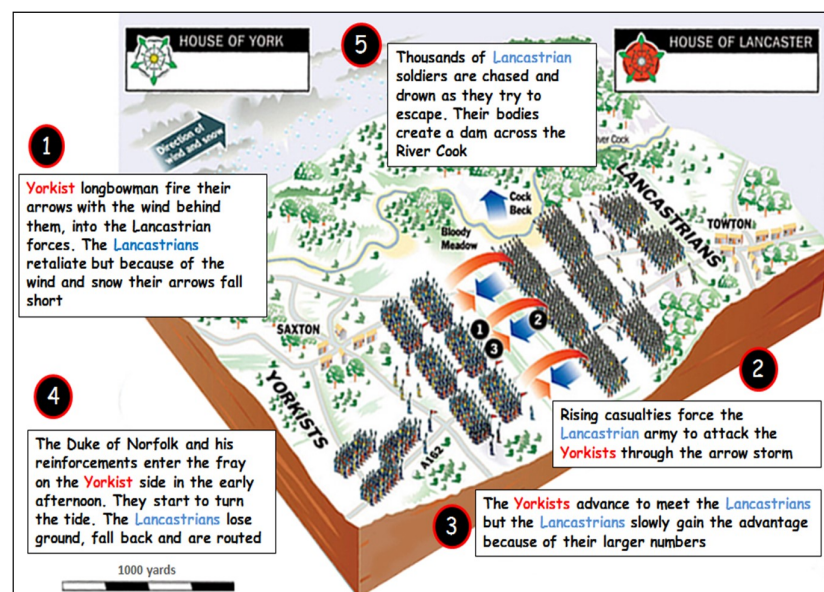
origin, with one exception. The single sample which didn't fit the same pattern showed an individual belonging to a Middle Eastern grouping – study of isotopes in his teeth confirmed differences in the location of his early upbringing from that of his companions, who were, broadly speaking, brought up in and around the Vale of York. Matthew ended his talk by referring to the enormous potential of ancient DNA sequencing in the investigation of movements of particular individuals and how this would enable us to see more clearly the lives of our distant ancestors.

Richard Stevens



The Battle of Towton

The Battle of Towton was fought on 29th March 1461 around the villages of Towton and Saxton some twelve miles southwest of York. It was the bloodiest battle ever fought on English soil, resulting in 28,000 deaths and the replacement of King Henry VI with King Edward IV. John Clifford, hereditary Sheriff of Westmorland and lord of Appleby



Castle was one of the 'Lancastrian' commanders who fought on King Henry's side and would almost certainly led Appleby men in the battle. Ever since that time, farmers have been ploughing up arrow-heads, buttons, buckles and even bones. The latter have all been carefully re-interred in the nearby Saxon churchyard.

In the 1990s, building work at Towton unearthed a mass grave with the remains of 37 men who had perished in the battle. Their skeletons showed that they had followed a regime of strenuous exercise since childhood, rather like that of an athlete, and it is thought they were probably professional soldiers with evidence that some may have been archers. All of the bodies had been

stripped and apparently mutilated before being buried in a shallow pit. Subsequent archaeological work has identified where the archery duel at the start of the battle took place. It has also established that hand guns were used during the battle and located the 'Leper Pot' marking the spot where Lord Clifford was killed. It may also have found the chantry which Richard III built to atone for all the deaths. For further information go to the Towton Battlefield Society website at: <https://www.towton.org.uk>

Adrian Waite

Loadpot (Swarth) Hill stone circle

I imagine most of you will have visited the Cockpit stone circle on Moor Divock above Ullswater. On a recent walk further up High Street near Loadpot Hill, however, I came across another stone circle that in my humble opinion is emphatically superior because of its wild, 'atmospheric' situation. Like the Cockpit stone circle, the Loadpot Hill circle lies close to the line of the Roman road and the ancient trackway that presumably preceded this. Sadly, it is



Must have been a busy place in the Bronze age!

in a very poor state of repair with some stones missing or buried and none currently upright in their original position. It lies in a broad basin of rough moorland at the head of Swarthbeck Gill, looking north towards Penrith. It's not at all easy to find but can be picked out from a distance by several pieces of rough slate forming a crude (modern) entrance. I must say I was initially disappointed. But once I got my eye in I realised there was a broad swath of rough slabs arcing away from the slate "gateposts" to form a circle of some 15m diameter.

Although a large section is either missing or lost in the peat, enough was left to give some impression of what the circle might have been like in its day. Large slabs lay in such profusion that they must have formed an almost continuous wall. As far as I could see, there was nothing in the way of an outer ditch or other earthworks, but I did discover a spring, bubbling up in the grass nearby. I've read about the common association of springs and prehistoric circles but this was the first time I'd actually seen evidence of it. It quite made my day!

Martin Joyce

Winter Lectures

• AGM and Members Evening

Thursday 11th January at 7.00pm

Martin Railton and supporting cast will provide a round-up of everything we've achieved through DigAppleby project over the last year - field-walking, surveying, test-pits, excavation, document-transcription and building-surveys.

• Travels of an Archaeologist Patricia Shaw

Thursday 8th February

Trish Shaw will tell us about her globe-trotting year as a professional archaeologist in 2017, starting with a spectacular holiday among the temples of Egypt and continuing with work, firstly on a Chalcolithic/Bronze Age site in Slovakia and then later on a Neolithic site in Romania.

• The Headlands to Headspace Project Louise Marti (H2H Cultural Heritage Officer)

Thursday 8th March

Headlands to Headspace (H2H) is a major project to protect and celebrate Morecambe Bay's rich heritage. The talk will focus on the history and archaeology of the area which has been investigated as part of a community archaeology project bay funded by the Heritage Lottery Fund. This has involved the identification and investigation of a wide range of archaeological and historic sites with the help of local volunteers.

• The late Iron Age royal site at Stanwick, North Yorkshire: new perspectives Prof Colin Hazelgrove

Thursday 12th April

Stanwick in the Tees valley is one of the largest prehistoric fortified sites in Europe. First occupied around 80 BC, it soon developed into a regional centre. Its 7km-long perimeter along with the exceptional Roman imports of this date suggests that the complex was the seat of Carimandua, the client ruler of the Brigantes. The talk will show how new research is continuing to challenge accepted understanding of Stanwick.

ADVERTISEMENT - I have a rather tatty and marked, type-written copy of a document entitled "An Act for Dividing and Inclosing the Common and Waste grounds within the village hamlet township and manor of Oxenhope in the County of York" which is over 200 years old. I have no use for it and will sell for £10 which I will donate to a charity. Surnames appearing in the document are Egerton, Asheton, Wood, Balme, Ferrand, Greenwood, Roberts, Rishworth, Murgatroyd. If anyone thinks they would find it of interest please let me know at one of our meetings. **Carol Dougherty**